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**Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Navy** **DATE:** February 2011

**APPROPRIATION/BUDGET ACTIVITY**

1319: *Research, Development, Test & Evaluation, Navy*  
BA 6: *RDT&E Management Support*

**R-1 ITEM NOMENCLATURE**

PE 0605863N: *RDT&E Ship & Aircraft Support*

<b>COST (\$ in Millions)</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012 Base</b>	<b>FY 2012 OCO</b>	<b>FY 2012 Total</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	168.428	95.332	136.531	-	136.531	104.620	158.130	163.980	102.348	Continuing	Continuing
0568: <i>RDT&amp;E Acft Flt Hours</i>	33.558	33.854	35.831	-	35.831	35.686	36.484	37.213	37.503	Continuing	Continuing
0569: <i>RDT&amp;E Acft Supt</i>	35.619	33.003	40.662	-	40.662	40.948	41.547	42.127	42.334	Continuing	Continuing
2924: <i>SDTS</i>	8.760	8.543	21.698	-	21.698	8.382	8.233	8.316	8.387	Continuing	Continuing
3206: <i>T&amp;E Enterprise</i>	90.491	19.932	38.340	-	38.340	19.604	71.866	76.324	14.124	Continuing	Continuing

**A. Mission Description and Budget Item Justification**

This continuing program provides support for ships and aircraft required to accommodate Research, Development, Test and Evaluation (RDT&E) of new systems. The RDT&E ship and aircraft inventory is required to adequately test new and improved weapon systems, stay current with threats, and increase warfighting capability of the fleet. The program provides integrated logistics support for aircraft at selected field activities; provides depot-level rework of aircraft, engines, and components for the Navy inventory of RDT&E aircraft; and provides support for ships and aircraft bailed to contractors for Navy RDT&E projects. Costs covered under this element include aircrew training and proficiency, fuel, supplies, equipment, repair, Aviation Depot Level Repairables, overhaul of ships and aircraft, as well as organizational, intermediate, and depot maintenance of ships and aircraft in the Navy RDT&E inventory.

**B. Program Change Summary (\$ in Millions)**

	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012 Base</b>	<b>FY 2012 OCO</b>	<b>FY 2012 Total</b>
Previous President's Budget	192.551	95.332	139.491	-	139.491
Current President's Budget	168.428	95.332	136.531	-	136.531
Total Adjustments	-24.123	-	-2.960	-	-2.960
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-20.762	-			
• SBIR/STTR Transfer	-4.817	-			
• Program Adjustments	1.461	-	-3.130	-	-3.130
• Rate/Misc Adjustments	-	-	0.170	-	0.170
• Congressional General Reductions Adjustments	-0.005	-	-	-	-

**Change Summary Explanation**

Technical: Not applicable.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605863N: RDT&E Ship & Aircraft Support	
Schedule: Not applicable.		

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2012 Navy								<b>DATE:</b> February 2011			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 6: <i>RDT&amp;E Management Support</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0605863N: <i>RDT&amp;E Ship &amp; Aircraft Support</i>				<b>PROJECT</b> 0568: <i>RDT&amp;E Acft Flt Hours</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012 Base</b>	<b>FY 2012 OCO</b>	<b>FY 2012 Total</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
0568: <i>RDT&amp;E Acft Flt Hours</i>	33.558	33.854	35.831	-	35.831	35.686	36.484	37.213	37.503	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
<b>A. Mission Description and Budget Item Justification</b> RDT&E Aircraft Flight Hours. This non-acquisition project supports direct flight hour costs, including organizational and intermediate level maintenance, as well as associated consumables, including petroleum, oil, and lubricants. These flight hours are used for post-maintenance test flights, aircrew training, and the accomplishment of pilot proficiency requirements (approximately 3 hours per pilot per month), in support of Research and Development programs at four Naval Air Systems Command/Naval Surface Warfare Center/Office of Naval Research flight activities.											
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>								<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	
<b>Title:</b> RDT&E Acft Flt Hours  <div style="text-align: right;"><b>Articles:</b></div> <b>FY 2010 Accomplishments:</b> Continued to provide in the plan organizational and intermediate-level maintenance, supply and petroleum, oil and lubricants in support of RDT&E aircraft operations.  <b>FY 2011 Plans:</b> Continue to provide in the plan organizational and intermediate-level maintenance, supply and petroleum, oil and lubricants in support of RDT&E aircraft operations.  <b>FY 2012 Plans:</b> Continue to provide in the plan organizational and intermediate-level maintenance, supply and petroleum, oil and lubricants in support of RDT&E aircraft operations.								33.558	33.854	35.831	
								0	0	0	
<b>Accomplishments/Planned Programs Subtotals</b>								33.558	33.854	35.831	
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A											
<b>D. Acquisition Strategy</b> Not Applicable											

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2012 Navy		<b>DATE:</b> February 2011
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 6: <i>RDT&amp;E Management Support</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0605863N: <i>RDT&amp;E Ship &amp; Aircraft Support</i>	<b>PROJECT</b> 0568: <i>RDT&amp;E Acft Flt Hours</i>

**E. Performance Metrics**

This RDT&E Aircraft program supports approximately 3 hours per pilot per month of post-maintenance test flights, aircrew training and the accomplishment of pilot proficiency requirements.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605863N: RDT&E Ship & Aircraft Support				PROJECT 0569: RDT&E Acft Supt			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
0569: RDT&E Acft Supt	35.619	33.003	40.662	-	40.662	40.948	41.547	42.127	42.334	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
Research, Development, Test and Evaluation (RDT&E) Aircraft Support. This continuing project funds costs associated with RDT&E fixed and rotary wing aircraft which accommodate test and evaluation of aircraft/weapon systems. Testing aboard these platforms reduces the number of fleet units required to support RDT&E efforts. Included in these costs are Aviation Depot-Level Repairables (AVDLR), which are spare and replacement aircraft parts and components to support overhead maintenance related flight operations, aircrew training, and proficiency flight hours. This project also funds airframe Standard Depot Level Maintenance (SDLM), the Integrated Maintenance Concept (IMC) and Phased Depot Maintenance (PDM), in-service repairs, emergency repairs, and engine repairs, as well as aircraft material condition and field inspections. Additionally, it funds Individual Material Readiness List (IMRL) tools and support equipment, and other systems for application to and compatibility with RDT&E requirements.											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2010	FY 2011	FY 2012	
Title: Aircraft/Engine Maintenance and AVDLR/IMRL Support  Articles:  FY 2010 Accomplishments: Continued in plan the transition from Aircraft Service Period Adjustment(ASPA)/SDLM to the IMC/PDM program for depot maintenance requirements, while sustaining the following programs: AVDLR/IMRL, engine repairs, support of aircraft in the RDT&E inventory. Continued operation and implementation of maintenance and material management programs at Naval Air Warfare Center activities.  FY 2011 Plans: Continue in plan the transition from ASPA/SDLM to the IMC/PDM program for depot maintenance requirements, while sustaining the following programs: AVDLR/IMRL, engine repairs, support of aircraft in the RDT&E inventory. Continue operation and implementation of maintenance and material management programs at Naval Air Warfare Center activities.  FY 2012 Plans: Continue in plan the transition from ASPA/SDLM to the IMC/PDM program for depot maintenance requirements, while sustaining the following programs: AVDLR/IMRL, engine repairs, support of aircraft in the RDT&E inventory. Continue operation and implementation of maintenance and material management programs at Naval Air Warfare Center activities.								34.019	31.380	39.028	
								0	0	0	
Title: In-Service Repairs  Articles:  FY 2010 Accomplishments:								1.600	1.623	1.634	
								0	0	0	

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2012 Navy		<b>DATE:</b> February 2011	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 6: <i>RDT&amp;E Management Support</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0605863N: <i>RDT&amp;E Ship &amp; Aircraft Support</i>	<b>PROJECT</b> 0569: <i>RDT&amp;E Acft Supt</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>		<b>FY 2010</b>	<b>FY 2011</b>
Continued to provide in the plan In-Service Repair funds for emergent repair requirements to aircraft performing mission critical test and evaluation projects.  <b><i>FY 2011 Plans:</i></b> Continue to provide in the plan In-Service Repair funds for emergent repair requirements to aircraft performing mission critical test and evaluation projects.  <b><i>FY 2012 Plans:</i></b> Continue to provide in the plan In-Service Repair funds for emergent repair requirements to aircraft performing mission critical test and evaluation projects.			
<b>Accomplishments/Planned Programs Subtotals</b>		35.619	33.003
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A			
<b>D. Acquisition Strategy</b> N/A			
<b>E. Performance Metrics</b> The RDT&E Aircraft Support program goal is to provide the required funds to meet NAVAIR Aircraft Controlling Custodian aircraft sustainment requirements. These sustainment costs include providing annual support for required Planned Depot Maintenance events, In-service Repairs (P&E, Repairs, Mods), Depot Engine Inductions, Individual Material Readiness List Repairs, along with the funding of management oversight of the aircraft and the Aviation Depot Level Repairable costs associated with pilot readiness requirements.			

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605863N: RDT&E Ship & Aircraft Support				PROJECT 2924: SDTS			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
2924: SDTS	8.760	8.543	21.698	-	21.698	8.382	8.233	8.316	8.387	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
This project provides for the maintenance of Hull Mechanical and Electrical (HM&E) and installed Combat Systems of the Self-Defense Test Ship (SDTS) in support of the Navy Research, Development, Test and Evaluation (RDT&E) of ship self-defense systems. Testing aboard this ship reduces the number of fleet units required to support RDT&E efforts.											
SDTS provides the capability to safely test self-defense weapon systems within their minimum range. A major cost of this project is regularly scheduled ship, combat system and remote control maintenance. The remainder of the funds is used for purchase of expendable supplies and routine equipment, fuel and petroleum products, and repairs and supporting services. Most costs are fixed and are associated with simply having this platform in the inventory.											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2010	FY 2011	FY 2012	
Title: SDTS  Articles:  FY 2010 Accomplishments: NAVSURFWARCENDIV Port Hueneme, CA SDTS will support documentation development for SDTS installations of multiple configurations and support preparation to modify top side and below deck equipment. SDTS will continue to conduct planning, scheduling, and performing of maintenance onboard EDD 964 for HM&E, CS and remote control elements to provide the Navy a safe operational test asset.  FY 2011 Plans: NAVSURFWARCENDIV Port Hueneme, CA SDTS will continue to conduct planning, scheduling, and performing of routine Hull, Mechanical and Electrical (HM&E) and Combat System and Remote Control maintenance onboard EDD 964 to provide the Navy a safe operational test asset. Support and begin preparation and conduct of drydock for continuation in FY12.  FY 2012 Plans: NAVSURFWARCENDIV Port Hueneme, CA SDTS will continue to conduct planning, scheduling, and performing of routine Hull, Mechanical and Electrical (HM&E) and conclude drydock support execution. Continue Combat System and Remote Control maintenance onboard EDD 964 to provide the Navy a safe operational test asset.								8.760	8.543	21.698	
								0	0	0	
Accomplishments/Planned Programs Subtotals								8.760	8.543	21.698	

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2012 Navy		<b>DATE:</b> February 2011
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 6: <i>RDT&amp;E Management Support</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0605863N: <i>RDT&amp;E Ship &amp; Aircraft Support</i>	<b>PROJECT</b> 2924: <i>SDTS</i>
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A		
<b>D. Acquisition Strategy</b> This line of accounting is for recurring combat system and ship maintenance.		
<b>E. Performance Metrics</b> Successfully remain safe, operational and available for testing and evaluation of systems. Successfully develop applicable operation and maintenance documentation and reporting of installations. Successfully timely report funding, schedule and technical delays, and issues in an unmanned, remotely controlled mode, if necessary affecting its availability status.		



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APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605863N: RDT&E Ship & Aircraft Support				PROJECT 3206: T&E Enterprise			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
3206: T&E Enterprise	90.491	19.932	38.340	-	38.340	19.604	71.866	76.324	14.124	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
<p>The T&amp;E Enterprise consolidates all Air Warfare (AW) Ship Self Defense (SSD) at-sea testing across multiple class ships, beginning with CVN 74, LHD 8, LPD17, LHA 6, DDG 1000, CVN 78, and Littoral Combat Ship (LCS). This consolidated AW SSD test and evaluation approach meets the Probability of Raid Annihilation (PRA) (PRA is defined as a required surface ship defense against Anti-Ship Cruise Missiles), Self Defense Test Ship (SDTS) testing requirements as outlined in Air Warfare Ship Self Defense Enterprise TEMP 1714, and lead/operational ship testing requirements for ESSM TEMP 1471, RAM Blk 2 TEMP 286-1, DDG 1000 TEMP 1560, CVN 78 TEMP 1610, CEC TEMP 1415, SSDS TEMP 1400, LHA 6 TEMP 1697, AN/SPQ-9B TEMP 1463, SEWIP TEMP 1658 (Block 1A), 0686, and LCS TEMP 1695.</p> <p>LHA 6 acquisition, installation and testing supports all big deck Amphibs and Carriers in the OA configuration as well as RAM BLK 2 OPEVAL, SSDS OA with RAM BLK 2, First non AEGIS SEWIP and ESSM.</p> <p>The T&amp;E Enterprise merges common ship, element, and system requirements into the least number of test events while leveraging planned Combat System Ship Qualification Trials (CSSQTs) to accomplish Developmental Testing (DT) and Operational Testing (OT) requirements. All tests on the SDTS require the sharing of infrastructure, missile range allocations, execution time and underway time to eliminate duplicative testing.</p> <p>T&amp;E Enterprise preserves end-to-end mission Operational Testing in a realistic operational environment, capitalizing on Probability of Raid Annihilation M&amp;S data validated with results of that Operational Testing, and ensuring a consistent approach across ship classes. Applicability of all test events is beneficial across multiple ship classes with the same variation under test.</p> <p>The T&amp;E Enterprise acquires equipment for installation onboard the SDTS, conducts test and evaluation on the SDTS and lead/operational ships and satisfies the Probability of Raid Annihilation (PRA) Testbed Model Development and test execution requirements.</p>											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2010	FY 2011	FY 2012	
Title: T&E Enterprise								90.491	19.932	38.340	
								Articles: 0	0	0	
FY 2010 Accomplishments: The primary focus of 2010 for T&E Enterprise is long lead acquisition of all combat system equipment needed for a leveraged installation period for the Self Defense Test Ship (SDTS). Ensure top side design coincides with the ordered/delivered Enterprise equipment onto the Self Defense Test Ship. Once equipment is in place installation services can begin and have been combined into a single window (where possible) in 2010 to reduce the duplication of multiple staging services (scaffolding, rigging, cabling,											

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2012 Navy		<b>DATE:</b> February 2011	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 6: <i>RDT&amp;E Management Support</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0605863N: <i>RDT&amp;E Ship &amp; Aircraft Support</i>	<b>PROJECT</b> 3206: <i>T&amp;E Enterprise</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>		<b>FY 2010</b>	<b>FY 2011</b>
<p>power generation, integration, etc.) PRA Testbed development, virtual range updates, and systems engineering will continue in support of LHA 6 and developed architecture will be documented for future support of future ship classes. Implementation and execution of Enterprise test events will continue to effectively leverage resources and support changes in ship delivery schedules.</p> <p><b><i>FY 2011 Plans:</i></b> The Enterprise effort shifts in 2011 to a test and evaluation focus for Enterprise ship classes onboard the Self Defense Test Ship (SDTS). Execution of test events will provide range time, threat and target build up, aircraft, use of the SDTS, DT/OT workups and applicable data analysis according to the Test and Evaluation Test Matrix. The PRA testbed will provide integration, components verification, validation and accreditation (VV&amp;A) and documentation.</p> <p><b><i>FY 2012 Plans:</i></b> The AW SSD Enterprise Strategy will focus on the installation of DDG 1000 equipment during the SDTS dry dock phase planned for FY11/FY12. In FY12, the focus will slightly shift to the beginning phases of acquisition for CVN 78 and continue with test and evaluation events and the continuation of PRA Testbed development and execution.</p>			
<b>Accomplishments/Planned Programs Subtotals</b>		90.491	19.932
<b>C. Other Program Funding Summary (\$ in Millions)</b>			
N/A			
<b>D. Acquisition Strategy</b>			
<p>Acquisition of test equipment assets for Enterprise Ship Classes.</p> <p>Acquisition of LHA 6 test equipment assets begins in FY09 and continues in FY10.</p> <p>Acquisition of systems is tailored to each ship class, however applicable and beneficial across multiple ship classes with the same variation being testing.</p> <p>DDG 1000 test equipment assets will be acquired through a direct contract.</p>			
<b>E. Performance Metrics</b>			
<p>Successfully complete required documentation and reporting for Enterprise installations and required check out and testing of installations. Successfully complete all Enterprise Operational Test Readiness Reviews (OTRR). Successfully complete required Enterprise developmental testing/operational testing DT/OT testing and combat system ship qualification trials (CSSQT) related tests with 0 casualty delays. Successfully collect related test result data and distribute accordingly.</p>			

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